

We claim:

1. An anti-corrosion coating system comprising:
a first layer formed from a corrosion inhibiting composition
5 comprising particulate metal, organic liquid, thickener, and a silane binding agent; and
a second layer disposed on said first layer, said second layer formed from a powder coat composition.
- 10 2. The anti-corrosion coating system of claim 1 wherein said particulate metal is selected from the group consisting of finely divided aluminum, manganese, cadmium, nickel, stainless steel, tin, ferroalloys, magnesium, zinc, and combinations thereof.
- 15 3. The anti-corrosion coating of claim 2 wherein said particulate metal is zinc.
4. The anti-corrosion coating system of claim 1, wherein said powder coat composition comprises a thermoplastic resin.
- 20 5. The anti-corrosion coating system of claim 4, wherein said thermoplastic resin is selected from the group consisting of polyvinyl chlorides, polyamides, polyethylenes, polypropylenes, poly(vinylidene) fluorides, and combinations thereof.
- 25 6. The anti-corrosion coating system of claim 1, wherein said powder coat composition comprises a thermoset resin.
7. The anti-corrosion coating system of claim 6, wherein said
30 thermoset resin is selected from the group consisting of epoxies, epoxy-polyesters, polyester-TGIC's, urethane polyesters, unsaturated polyesters, acrylics, and combinations thereof.
8. An anti-corrosion coating system comprising:

a first layer formed from a composition including zinc flakes and aluminum flakes dispersed in a binder; and

a second layer disposed on said first layer, said second layer formed from a powder coat composition.

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9. The anti-corrosion coating system of claim 8, wherein said powder coat composition comprises a thermoplastic resin.

10. The anti-corrosion coating system of claim 9, wherein said thermoplastic resin is selected from the group consisting of polyvinyl chlorides, polyamides, polyethylenes, polypropylenes, poly(vinylidene) fluorides, and combinations thereof.

11. The anti-corrosion coating system of claim 8, wherein said powder coat composition comprises a thermoset resin.

12. The anti-corrosion coating system of claim 11, wherein said thermoset resin is selected from the group consisting of epoxies, epoxy-polyesters, polyester-TGIC's, urethane polyesters, unsaturated polyesters, acrylics, and combinations thereof.

13. An anti-corrosion coating system comprising:
a first layer formed from a composition comprising zinc alloy in particulate form comprising greater than 50 weight percent zinc and less than 50 weight percent of non-zinc alloy metal; and
a second layer disposed on said first layer, said second layer formed from a powder coat composition.

14. The coating system of claim 13 wherein said zinc alloy is in flake form and is zinc alloyed with at least one metal selected from the group consisting of aluminum, tin, magnesium, nickel, cobalt, manganese, and combinations thereof.

15. The anti-corrosion coating system of claim 13, wherein said powder coat composition comprises a thermoplastic resin.

16. The anti-corrosion coating system of claim 15, wherein said thermoplastic resin is selected from the group consisting of polyvinyl chlorides, polyamides, polyethylenes, polypropylenes, poly(vinylidene) fluorides, and combinations thereof.

17. The anti-corrosion coating system of claim 13, wherein said powder coat composition comprises a thermoset resin.

18. The anti-corrosion coating system of claim 17, wherein said thermoset resin is selected from the group consisting of epoxies, epoxy-polyesters, polyester-TGIC's, urethane polyesters, unsaturated polyesters, acrylics, and combinations thereof.

19. An anti-corrosion coating system comprising:
a first layer formed from a composition comprising (A) liquid medium, (B) zinc alloy in particulate form comprising greater than 50 weight percent zinc and less than 50 weight percent of non-zinc alloy metal and (C) silane binding agent; and
a second layer disposed on said first layer, said second layer formed from a powder coat composition.

20. The coating system of claim 19 wherein said zinc alloy is in flake form and is zinc alloyed with at least one metal selected from the group consisting of aluminum, tin, magnesium, nickel, cobalt, manganese, and combinations thereof.

21. The anti-corrosion coating system of claim 19, wherein said powder coat composition comprises a thermoplastic resin.

22. The anti-corrosion coating system of claim 21, wherein said thermoplastic resin is selected from the group consisting of polyvinyl chlorides, polyamides, polyethylenes, polypropylenes, poly(vinylidene) fluorides, and combinations thereof.

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23. The anti-corrosion coating system of claim 19, wherein said powder coat composition comprises a thermoset resin.

24. The anti-corrosion coating system of claim 23, wherein said
10 thermoset resin is selected from the group consisting of epoxies, epoxy-polyesters, polyester-TGIC's, urethane polyesters, unsaturated polyesters, acrylics, and combinations thereof.

25. An anti-corrosion coating system comprising:
15 a first layer formed from a composition comprising (A) liquid medium, (B) zinc alloy in particulate form comprising greater than 50 weight percent zinc and less than 50 weight percent of non-zinc alloy metal, and (C) one or more of a water-soluble and water dispersible silica substance; and
a second layer disposed on said first layer, said second layer
20 formed from a powder coat composition.

26. The coating system of claim 25 wherein said zinc alloy is in flake form and is zinc alloyed with at least one metal selected from the group consisting of aluminum, tin, magnesium, nickel, cobalt, manganese, and
25 combinations thereof.

27. The anti-corrosion coating system of claim 25, wherein said powder coat composition comprises a thermoplastic resin.

30 28. The anti-corrosion coating system of claim 27, wherein said thermoplastic resin is selected from the group consisting of polyvinyl chlorides, polyamides, polyethylenes, polypropylenes, poly(vinylidene) fluorides, and combinations thereof.

29. The anti-corrosion coating system of claim 25 wherein said powder coat composition comprises a thermoset resin.

- 5 30. The anti-corrosion coating system of claim 29, wherein said thermoset resin is selected from the group consisting of epoxies, epoxy-polyesters, polyester-TGIC's, urethane polyesters, unsaturated polyesters, acrylics, and combinations thereof.